



# Onto Greener Pastures with Rotational Grazing and Cover Crops



Carly Huggins

Agroecology MS Program, University of Wisconsin-Madison



## What are we doing?

Cover crops in annual grain cropping systems of the upper Midwest are touted for improving soil health and reducing nutrient losses to ground and surface waters. In Wisconsin, cover crop acreage grew 10% from 2012 to 2017 (1). But questions persist about cover crop cost conservation efficacy and economic feasibility leading many to consider grazing cover crops in fall and/or spring to increase revenue to cover their costs.

We are collaborating with four farmers from the Sauk Soil Water Improvement Group (SSWIG) to document soil, plant, and agronomic responses to fall and spring rotational grazing of cover crops.

Site	Fencing (\$/ac)		Optimal Take Half/Leave Half		Actual Forage Utilization	
	Fencing (\$/ac)	CC Seed (\$/ac)	Feed Value (\$/ac)	Net Profit (\$/ac)	Feed Value (\$/ac)	Net Profit (\$/ac)
Site 1	\$ (40.69)	\$ (31.22)	\$ 995.99	\$ 1,067.90	\$ 891.57	\$ 963.48
Site 2	\$ (79.83)	\$ (34.40)	\$ 1,070.04	\$ 1,184.27	\$ 63.73	\$ 177.96
Site 3	-- *	\$ (97.83)	\$ 865.35	\$ 963.19	\$ 732.95	\$ 830.78
Site 4	-- *	\$ (58.08)	\$ 2,495.01	\$ 2,553.08	\$ 4,670.14	\$ 4,728.22

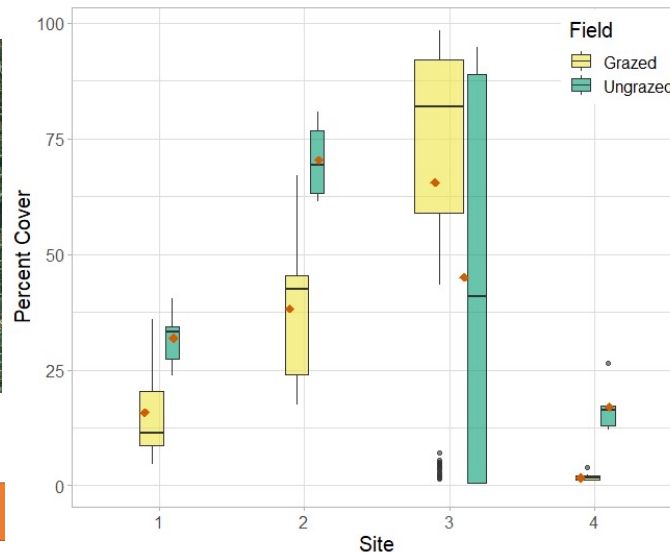
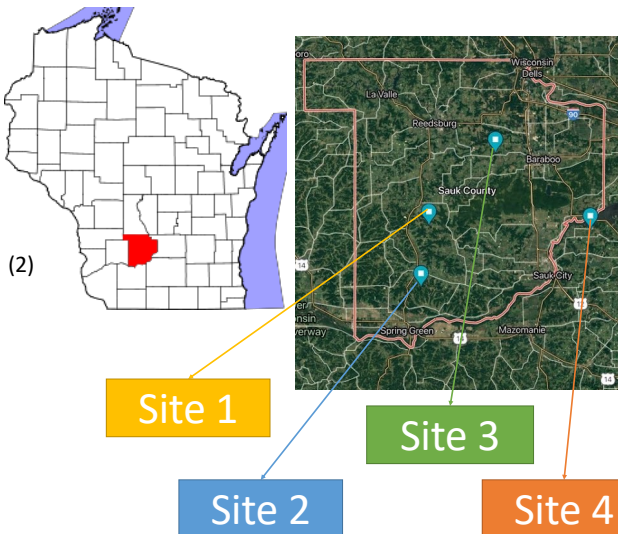
\*No fencing was purchased for this project..

## What have we found?

Rotational grazing of cover crops can result in increased profits.

Plant cover reduced 15-33% by grazing at 3 farms, but increased 19% at 1 farm.

Map of Wisconsin, Sauk County Soils, and farm site locations.



## The implications so far...

While grazing cover crops has the potential to make them a profitable practice, the reduction in plant cover heading into winter months may undermine soil protection gains.

## What's next?

1. Soil and plant sampling (pre- and post- grazing).
2. Soil health assessment.
3. Cover crop feed quality analysis.
4. Further cost and savings analysis.

### References

(1)(USDANASS2019a).(2)([https://en.wikipedia.org/wiki/Sauk\\_County,\\_Wisconsin](https://en.wikipedia.org/wiki/Sauk_County,_Wisconsin))



This work was funded by a USDA NCR SARE grant (2020-38640-31522) and USDA SAS CAP project Grassland 2.0 (20196801229852).